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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,611	04/16/2004	Wolfgang Gawrisch	HENK-0069/H 4842	1188
38857	7590	05/11/2005	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR PHILADELPHIA, PA 19103			PEZZUTO, HELEN LEE	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 05/11/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,611

Applicant(s)

GAWRISCH ET AL.

Examiner

Helen L. Pezzuto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 4 and 22 is/are allowed.
6) ☒ Claim(s) 1,3-11,13-21 and 23-25 is/are rejected.
7) ☒ Claim(s) 2 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment to claims 1, 3-4, 6, 10, the cancellation of claim 12, and the addition of claims 22-25 filed in the response on 2/7/05 are acknowledged. Currently, claims 1-11, and 13-25 are pending in this application.

In view of applicant's amendment to claims 3, 6, 10, previous 112 rejection of record is hereby withdrawn.

Election/Restrictions

1. Newly submitted claim 23 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The process recited in newly submitted claim 23 is directed to a post-polymerization treatment of the copolymer in claim 1, which is a distinctive process than producing the copolymer of claim 1 per se.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 23 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

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Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-11, 13-14, 16-21, and 24-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pechhold et al. (US-493).

US 5,945,493 to Pechhold et al. discloses a stain and soil resistance composition, comprising a water soluble fluorine-containing maleic acid terpolymer as defined by formula I. Specifically, prior art f unit embraces the instant structural unit (I) or monomer (III), and the corresponding d, e units embrace the instant structural element (II) or monomer (V). The embodiment as defined in claim 3 is exemplified and thus, is anticipated (col. 1, lines 33-67; col. 3, lines 12-67; working examples). The recited molar proportions expressed in claim 8 and the molecular weight expressed in claim 10 is taught in the reference (col. 3, lines 3-12; working examples). Prior art discloses applying 0.3-3.0% of active ingredients in an aqueous terpolymer solution to fiber/fabric, inclusive of natural and synthetic fibers (col. 2, lines 19-29; col. 4, lines 44-51; col. 5, lines 6-32), and subsequently drying the coating by thermal means (col. 5, application methods), thus, anticipating the limitations expressed in claims 13-14, and 17-21.

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5. Claims 1, 6-9, 13-14, 16-21, 24-25 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Soane et al. (US-336).

US 6,380,336 to Soane et al. discloses an oil and water repellent composition applicable to textiles/fibrous substrates, comprising a fluorine-containing copolymer. Prior art copolymer comprises one or more a fluorochemical component inclusive of 30-70 wt% of one or more fluoroaliphatic radical-containing (meth)acrylates as defined by formula I, which falls within the scope of the instant structural element (II) or monomer IV (col. 2, line 66 to col. 3, line 36). Among others, prior art copolymer contains monomer (d), inclusive of dicarboxylic acids/anhydrides such as maleic acid/anhydride and others which embrace the instant structural element (I) or monomer (III) (col. 3, lines 45-59). Prior art composition comprises 3% of the resulting copolymer, and water (col. 4, lines 8-44), and further teaches the application of the composition to various fibrous substrates, inclusive of those presently recited (col. 4, line 58 to col. 5, line 47; working examples 4-5). Thus, anticipating the present claims.

6. Claims 1, 5, 8-9, 13, 16-19, and 24-25 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wang et al. (US-421).

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US 6,503,421 to Wang et al. discloses a process of making an optical terpolymer, comprising 10-90 wt% of a halogenated phenyl maleimide (I), one or more halogenated monomer (II), and one or more ethylenically unsaturated monomer (III) (col. 2, lines 33-60; col. 4, lines 1-31; (col. 5, line 20 to col. 6, line 27). Prior art monomers (I), (II), and (III) reads on the instant structural elements (I), (IV), and (II) or monomers (III), (IV) and (V), respectively as defines in the present claims (col. 7-8, Table 5; working example 1-3; col. 13, lines 1-26). The reference teaches spin coating the resulting terpolymer composition onto a silicon wafer, meeting the limitations expressed in claims 17-19. Thus, anticipating the present claims.

7. Claims 1, 5, 7-9, 11, 13-14, and 17-21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over CA 942900.

CA 942900 discloses polymers having enhanced soil repellent properties and utility as surface treating agents for textiles, and leather and others. Prior art polymer comprises unsaturated perfluoroalkylamides or imides polymerized with other vinyl monomers (page 1, line 1 to page 2, line 22; page 3, lines 13-25). Suitable vinyl co-monomers are disclosed, including monomers that embrace the instant structural element (II) and

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(IV) (page 4, line 22 to page 6, line 29). Prior art exemplifies copolymers derived from perfluoroalkyl imides and perfluoroalkyl (meth)acrylates (pages 11-14, examples 7-21; Table 1), and the subsequent application to fibrous substrates. Hence, anticipating the present claims.

Regarding the limitation of polydispersity less than 7 recited in claim 1, the examiner is of the position this is not a significant or unexpected property related to polymers in general, as shown in page 300 in the attached Encyclopedia of Polymer Science and Engineering, wherein a typical polydispersity for radical polymerization ranges from 2.0-5.0. The polydispersity recited in newly submitted claims 24-25 are within this range. Furthermore, the examiner takes the position that the recited polydispersity property is considered inherent in prior art polymer product because they were formed by radical polymerization techniques. The burden is upon the applicant to provide clear evidence that the respective polymer compositions do in fact differ.

Claim Rejections - 35 USC § 103

8. Claims 1, 3, 7-21, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (US-175).

US 5,883,175 to Kubo et al. discloses a stain proof composition comprising a polymer emulsion suitably use on

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fibrous materials. Prior art polymer emulsion comprises the polymerized product of at least one polyfluoroalkyl-group compound, inclusive of polyfluoroalkyl (meth)acrylate defined in formula (1) or polyfluoroalkyl maleate defined in formula (3), dissolved in an unsaturated monomer (col. 1, lines 10-21; col. 2, line 28 to col. 3, line 57; col. 4, line 12 to col. 5, line 53). Prior art emulsion has molecular weight which falls within the present range. Suitable substrate to be treated includes textiles derived from natural and synthetic fibers (col. 5, line 65 to col. 6, line 10). Prior art perfluoroalkyl (meth)acrylate (1) and fluoroalkyl maleate (3) encompass the presently claimed elements (I) and (IV), and the monomer disclosed encompass the instant element (II). Prior art does not expressively exemplify the embodiment of (I)/(II) and/or (I)/(IV) within the scope of the present claims, but do teaches the equivalence or altercative use of (I) and (IV). The examiner is of the position that it would have been obvious to one skilled in the art to employ both for the expected additive result in light of their having been taught as suitable alternatives by the patentees. Absent evidence of unexpected results, no patentability can be seen in using a mixture of two elements wherein each is used for the same purpose by the prior art. Finally, as discussed in the preceding paragraph, absence of unexpected or unusual

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comparative results demonstrated within the scope of the present claims, no patentability is seen in recited non-limiting polydispersity property.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over all prior art references discussed in the preceding paragraphs and further in view of the following remarks.

Prior art references do not expressly exemplify the "drop wise" addition expressed in claim 15. Absent evidence of unusual or unexpected results, the examiner is of the position that drop wise addition of monomers would be an obvious variation insofar as there are only a limited number of conventional ways of adding ingredients, and drop wise addition is one of them. Such practice would only require routine skill in the art.

Allowable Subject Matter

10. the embodiments expressed in claims 4 and 22 is allowable over prior art of record.

11. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

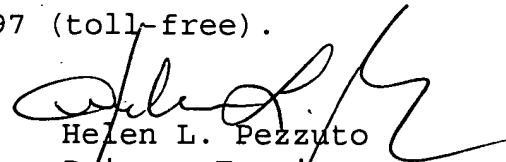
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization

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where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp